## Truck-mounted concrete pump 36-4

High performance and lightweight





### Efficient work, day after day – the new 36-4



The 36-4 is the efficient all-rounder in its class. The performance and quality are similar to what you are familiar with from all truck-mounted concrete pumps from Putzmeister. No compromises are made whether it is a big or small machine – just technology and comfort at the highest level.

In terms of standard – the 36-4 reaches around 36 m, demonstrating enormous flexibility. Because the Z-folding makes it very adaptable, not least because of the optimal slip properties. Whether it is in the production hall, under bridges and underpasses or for the construction of multi-storey buildings, the 36-4 is very suitable for versatile work and with ease because we have further optimised the entire machine with respect to its weight. This allows more scope for loading accessories and operating materials, because the 36-4 offers high reserves with its surprisingly low weight in order to operate legally on all roads. You therefore easily reach the next place of use guickly, and economically.



### Everything a truck-mounted concrete pump should have

Over 50 years of experience in the design of truck-mounted concrete pumps are embedded in the 36-4, just like in all our machines of the latest generation. What could be optimised was implemented in the development and design of the 36-4. The fulfilment of your wishes for even more comfort in the operation, profitability in daily use and flexibility in the application, is implemented with skill in this machine. The cherished values like robustness and reliability have been retained. The result is the most advanced 36-4 ever. With amazingly universal skills, an astonishingly lightweight design and space requirement and at an extremely good price, and on top of all these advantages, it is also extremely efficient to maintain – not just today, but throughout its entire life.

#### Your benefits at a glance

- A gross weight of less than 26 t incl. sufficient reserves for payload and operating materials
- Steady 4-arm placing boom thanks to intelligent laying of the delivery line and the balanced development of the steel structure
- Efficient work through consistently clever ergonomic design
- Even better safety through closer consideration for current standards and guidelines
- Service-friendly as a result of its optimised accessibility and consistent bolted concept
- Lower service costs thanks to maintenance-free components, fewer special components (e.g. only 2 standard delivery line bends) and lower volumes of operating materials (oil volume reduced by 30%)

# The placing boom – doing more with less

## Large reach – high flexibility

Approximately 36 m reach distributed over 4 arms and in compact Z-folding – this has astounding advantages. Because the 4-arm boom is easy to handle and with the excellent slip properties of the Z-folding ensures diversity in the application. Because the design principle is consistently well thought-out and as a result it's inexpensive and very light. It can be folded in and out quickly and thus saves valuable work time.

The Z-folding offers impressive flexibility and is thus extremely efficient in many applications. But irrespective of the number of arms or the folding – the optimised kinematics of our placing booms ensure that there is no "dead space", instead more workspace is created.





#### Intelligent design - simple handling

The placing boom of the 36-4 is very comfortable to control thanks to its 4-arm structure. Particularly in situations, which demand very precise movements of the boom due to tight spaces, the lightweight design and the direct response characteristics of the optimised boom control ensure user-friendly handling. The minimal boom vibrations also in the case of high delivery rates facilitate the placing of the concrete and guarantee the required safety. The clever laying of the delivery lines and the balanced development of the steel structure are responsible for this.

The optional fully electronic control of the placing boom EBC (Ergonic<sup>®</sup> Boom Control) also plays a significant role. The integrated vibration damping, which enables constantly smooth guidance of the end hose, eases the burden on operators considerably. The control of the boom in one-handed operation using a joystick also offers a further benefit because with the joystick the boom can move more steadily. Settings such as the restrictions of the workspace or the blocking of arm positions also increase the operational reliability.

## Reduced weight – Reduced maintenance and wear

The 4-arm placing boom is sufficient for most applications in the medium boom class. In comparison to other placing booms, it has the advantage of having an extremely lightweight design. The weight reduction can be used for a higher additional load, for example. It is also relatively easy to operate thanks to its design principle.

The costs for service and maintenance must be kept low. With this in mind, we have once again optimised the new series. Only components with a high wear resistance, as well as maintenance-free components and where possible many standard components were installed.

For example, we have reduced the bend types in the boom from 7 to 2 standard delivery line bends. Screwed-in pipeline supports save time and money when aligning the delivery line. Good accessibility makes service and repair work much easier, quicker and more cost-effective.





#### The new boom at a glance

- Approx. 36 m vertical reach with 4 arms in Z-folding
- No dead space, enhanced flexibility
- Direct response characteristics of boom control
- Safety thanks to reduced boom vibrations
- EBC (optional) for vibration damping, one-handed control, restrictions of workspace
- Standard delivery line bends of 90° and 45° with extended collars on both sides for longer service life
- Low unfolding height

## The substructure – superb class with modest dimensions



## Dynamism meets driving comfort

The traffic is getting heavier, the spatial conditions on the construction sites are becoming more restricted and the licensing requirements stricter. This is not a problem with the 36-4 because it cannot be stopped by one thing or another! It reaches its destination flexibly and thanks to its lightweight design it even has more than enough fuel and accessories on board. The wide platform with anti-slip surface offers sufficient space in this regard. The driving comfort is also impressive. Improved torsion properties and enhanced flexibility in the substructure make driving a pleasure.

Save space – be safe

The slim line machine is also stable and reliable. With the TRDI support developed by Putzmeister you save time and space, without compromising on safety. Construction sites frequently only offer restricted set-up conditions, because they are located in urban areas or along busy roads. Telescoping support legs can also be securely placed in minimal spaces between obstacles. And with the optional One Side Support (OSS\*) and ESC (Ergonic<sup>®</sup> Setup Control)\*\* the noticeably smaller support width of less than 7 m is reduced by roughly  $\mathcal{V}_3$  An important side effect: Full use is made of the net reach for the fully supported side.

- \* OSS assistance system for One Side Support, optional.
- \*\* ESC safety system for One Side Support (i.a.w. EN 12001:2012).





#### Thinking leads to superiority

Our aim is to always think one step ahead. This is why the development of TRDI involved more than the idea of a flexible, safe support. Another benefit lies in the force distribution. If the machine is supported correctly, then it stands freely on its legs. Forces are not distributed to the vehicle frame, but are distributed over the support legs. The vehicle is protected.

The new I frame and connection concept also ensures a longer service life in comparison to fixed frames. Maintenance-free components, the new comprehensive bolted concept, as well as the consistent use of standard components, make the operating and maintenance costs pleasantly unassuming and easy to calculate.

## The new substructure at a glance

- Lightweight design offers high weight reserves
- I frame concept for improved torsion properties and longer service life
- Flexible, space-saving TRDI support system
- Significantly reduced support widths with use of OSS and ESC
- Less obstacles in the surrounding area, such as traffic for example



## The concrete pump – such performance is only possible in a team

#### Interaction of components

Concrete pumps from Putzmeister are designed for all common types of concrete with their coordinated geometry. This is thanks to the closed loop of the free flow hydraulics, among other things. This drive transfers more power and saves resources because the oil reaches the cylinder with minimal losses. In connection with the new Putzmeister concept for modern oil management, the oil volume was reduced a full 30 %.

A further success factor is the S-tube point, which has a long service life even with wear-intensive materials, because the S-tube is reinforced with hard layer welding. The service intervals are considerably longer and the availability of the machine is higher than for other systems.

#### It's a win-win situation

Like with all Putzmeister truckmounted concrete pumps, with the 36-4 different pumps with 85 bar conveying pressure are available to you: The 16 H with a chromium-plated delivery cylinder (Ø 230 mm), which is cheaper in comparison, and the smoother 16 H LS (Ø 250 mm) with 160 m3/h delivery rate, however, with a lower number of strokes and less wear in the LS version. You are therefore able to base your offer entirely on the requirements of your customers.





#### The output can be controlled

Here nothing is left to chance, because success can be controlled. Thanks to the computer-based control via EPS (Ergonic<sup>®</sup> Pump System), which is integrated as standard in all models, the excellent performance and comfortable handling of the concrete pumps are guaranteed. EPS controls the pumping process using computers, so that it is smoother overall and the boom vibrations are reduced. The pump data is optimally coordinated with EPS and adapted to the respective application.

Besides EPS, EOC (Ergonic<sup>®</sup> Output Control) is an effective module to work efficiently and safe. Because EOC controls the engine speed with lower fuel consumption, wear and noise, unfavourable areas are automatically avoided. EOC is included in EPS and thus integrated as standard in all pumps.

The same applies to the so-called SN (Surge Neutralizer) control and Push Over. They ensure that switchovers are optimised and wear-intensive pressure peaks are avoided. In addition to the reduction of boom vibrations, they extend the service life of the drive, delivery line and mountings.

#### You have it under control!

Everything under control and always the best overview. The is simple and comfortable with the EPS-controlled pump because the graphic display and the radio remote control system facilitate the operation and ensure transparency. At the EGD (Ergonic<sup>®</sup> Graphic Display) the driver can view all relevant machine data and set or adjust individual parameters. Thanks to a reliable fault management system, the machine can be fully operational in the event of a fault, and even in emergency operation.



#### The pump at a glance

- Pump geometry is optimally coordinated to all common types of concrete
- Service-friendly control system with free flow hydraulics and thus consistently high oil quality
- Particularly wear-resistant design of S-tube switch, which guarantees long service life
- Optimised hopper (bolted grille, improved shape and optimised S-tube storage)
- Agitator safety shutdown via RFID (Radio Frequency Identification), a detection system with help of electromagnetic waves, including start-up protection
- Smooth, optimised pumping with EPS and EOC, protects the pump and the vehicle

- Optimised switchover with SN control and Push Over avoids wear-intensive pressure peaks
- **Comfortable operation** with display and radio remote control system
- Lower operating costs thanks to maintenance-free components, avoidance of special components and good accessibility
- Improved replacement of components with bolted concept

With the Putzmeister 36-4 you receive a machine which already boasts a comprehensive range of practical equipment as standard. With the diverse optional equipment, you can also adapt your range of services to the needs and requirements of your customers.



Supplied as standard	Optional
Ergonic <sup>®</sup> (EPS, EOC and EGD with fault management)	Vibrator can be positioned as required thanks to the bolted grille
Hopper centralised lubrication system	OSS (One Side Support) and ESC
Radio remote control system with display and additional cable remote control	Lighting system
Rotatable 45° delivery line bend with long collars	Bypass filter for even better oil quality
Spacious platform	EBC (Ergonic <sup>®</sup> Boom Control)
Water tank with 800 I	Collapsible under ride guard with lighting
Agitator safety shutdown via RFID with start-up protection	Compressor
Connections for emergency supply	Ergonomic work platform
Chromium-plated delivery cylinder	

And much more ...

LED lights - optional

#### Service

- Service points in over 150 countries across the globe
- **24-hour emergency service** in Germany
- **Tested original parts with warranty** and a 24-hour delivery service
- Status and diagnosis data via Ergonic<sup>®</sup> Tele Service (ETS) with transfer to separate workshop or Putzmeister service partner
- Manufacturer's inspection in accordance with the requirements of the VDMA (German Engineering Federation)
- Individual training courses and seminars in the Putzmeister Academy
- Competent advice and planning support for large projects, e.g. for concreting logistics, concreting processes and concreting technology by Putzmeister project engineers of CPD (Concrete Project Division)

#### If you have any further questions we are happy to answer them:

spareparts@pmw.de (for questions on spare parts) services@pmw.de (for technical questions)



#### Technical data – Pumps

Туре	Delivery rate m3⁄h	Pressure bar	Stroke mm	Cylinder Ø mm	Strokes/ min	
16 H	160	85	2100	230	31	
16 H LS	160	85	2100	250	26	

All data represent theoretical maximum values

Max. delivery rates and max. conveying pressures cannot be operated at the same time. Standard boom pipework: Pressure up to max. 85 bar.

 \* ESC (Ergonic<sup>®</sup> Setup Control) – safety system for One Side Support (i.a.w. EN 12001:2012); availability and scope of functions depend on machine model.
OSS (One Side Support) – assistance system for One Side Support. Availability depends on machine model. Not authorised for the European Economic Area (EEA).

#### Technical data – Placing boom

Folding type	4-arm Z-folding (Z)
Vertical reach	35.6 m
Horizontal reach	31.4 m (gross)
Depth of reach	23.9 m
Unfolding height	8.5 m
End hose length	4 m
Delivery lines	DN 125, max. 85 bar
Slewing circle	365°

#### Technical data – General

Support width	front / rear
normal	5.5 m / approx. 6.9 m
OSS/ESC*	3.9 m / approx. 5.7 m
Overall length	approx. 10.9 m
Height	under 4.0 m



Dimensions are model-dependent and may vary. Gross weight depending on equipment and chassis  $\leq$  24.6 t

### The 36-4 at a glance

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- Steady 4-arm placing boom thanks to intelligent laying of the delivery line and the harmonious development of the steel structure
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- Even better safety through closer consideration for current standards and guidelines
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Note: The diagrams in the prospectus do not necessarily correspond to the scope of standard equipment for the machines. Further prospectuses: Ergonic® 3763

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